

Appendix III

**Field Observation Reports for Installation of
OPW, CNI, and Phil-Tite Phase I EVR Systems
and Subsequent Post-Installation ELD Testing**

OPW

Willows, California
July 1-2, 2004

APPENDIX III

STAFF REPORT BY MR. MICHAEL SAHLIN, SWRCB
FINAL ELD TEST
OPW EVR PHASE I EO VR-102-D

July 1-2, 2004
Willows Shell
1300 W. Wood
Willows, CA

In Attendance:

Mr. Michael Sahlin – SWRCB
Mr. Bill Kelso – Contractor, Ed Staub & Sons
Mr. Kevin Tokunaga – Glenn County
Mr. Rick Steward – Glenn County
Mr. Clarence Sullivan – Praxair Services Inc.
Mr. Roy Barrows – Praxair Services Inc.

This new UST facility is located on the Southwest corner of Wood Street and Humboldt Avenue. This facility is branded as a Shell but is privately owned and operated. Mr. Kevin Tokunaga of Glenn County was at the site on June 30, 2004 and verified that the OPW spill buckets were installed and torqued to the manufacturer's specifications. A helium pre-test was conducted by Praxair Services Inc. (PSI) on June 4, 2004.

On July 1, 2004, PSI arrived on-site at 7:30 AM to start setting up for the final test. The leak simulation was started at 9:30 AM by injecting Tracer "E" into the vent horizontal sampling probe (HSP) midway between the tanks. The leak simulation tracer was found in sufficient concentration to establish the Enhanced TracerTight® test (often referred to as ELD) timetable at 12.5 hours after inoculation for this UST facility. The vapor and primary product lines were inoculated at 2:00-2:30 PM with Tracer "W," the tanks were inoculated with Tracer "A" at 4:30 PM and pressurized with helium to 0.5 psi, vapor lines to 0.5 psi (Tracer A), and the product lines inoculated with Tracer "W" and pressurized to 50 psi. Mr. Rick Steward, Mr. Tokunaga, and Mr. Sahlin witnessed these events.

Mr. Tokunaga and Mr. Michael Sahlin witnessed PSI using their standard operating procedures to inoculate the vapor piping at the furthest point of the dispenser area and then collect vapor samples from the vent pipes to show that tracer gas was dispersed throughout the entire length of the vapor piping runs. Samples were collected from the secondary space of the vent and product piping and no tracer was detected. The vent and primary product piping passed by 7:30 PM on July 1, 2004. Samples were collected from the tank top sumps and the HSPs on July 2, 2004 and no tracer was detected. The tanks and entire UST facility passed on July 2, 2004.

See attachments:

- (A) Letter from Mr. Kevin Tokunaga with attachment: Site Identification Information portion of OPW EVR Phase I Equipment Installation Check List (Revised 03/15/04) initialed by Mr. Kevin Tokunaga
- (B) Completed OPW EVR Phase I Equipment Installation Check List (Revised 03/15/04)
- (C) PSI Job Log for final ELD test, July 1-2, 2004

County of Glenn

Air Pollution Control District

WILLIAM R. DUCKWORTH
Air Pollution Control Officer
Director: Unified Program

MARK D. BLACK
Assistant Air Pollution Control Officer
Unified Program

Willows Shell Enhanced Leak Detection Test (Final Test)
June 30-July 2, 2004

OPW EVR Phase I VR-102-D

Contractor: Ed Staub and Sons, Petroleum, Inc
Installer: Bill Kelso
PraxAir: Clarence Sullivan, Roy Barrow
Pre-Test: Dave Erickson, Jackson Julson
GCAPCD: Kevin Tokunaga
GCCUPA: Rick Steward

Torque Settings at the Vapor and Product risers

Torque settings on the product and vapor four inch nipples above the Face Seal Adaptor were observed and verified to be tightened at 160-165 ft pounds. A torque wrench was used in conjunction with a 1/2" to 3/4" drive adapter and the OPW 61SA Rotatable Adaptor Socket to verify torque settings.

Note: I cannot attest to the torque settings for the FSA-400 Face Seal Adaptor. To do so at this time would have required the removal of the spill bucket and thus compromised the results of the previously performed helium pre-test and the current ELD test. When the above torque settings were observed at 160-165 foot pounds I watched for any rotation below the nipple and did not see any movement. Although I cannot verify the FSA-400 to be torqued to 200 ft/lbs, I can verify it to be at least 160-165 ft pounds.

Summary: The tank system passed the ELD test after some minor leaking around the TLS riser on the 91 Premium tank was tightened. The TLS risers on both 87 Regular and 91 Premium were not in place during the previous "pre-test". The initial leak (on the final test) was not the result of leaking Phase I vapor recovery equipment.

See attached OPW EVR Phase I Equipment Installation Checklist

Kevin Tokunaga
Glenn County APCD

C:\Documents and Settings\KTOKUNAGA.AGWORLD\Desktop\Willows Shell Enhanced Leak Detection Test.doc

OPW
EVR Phase I Equipment
Installation Check List
(Revised 03/15/04)

Site Identification Information

Site Address: WILLOWS SHELL

1300 W. WOOD ST.

WILLOWS, CA. 95988

Installing Company: ED STAUB & SONS

Technician's Name (Print Clearly): BILL KELSO

Technician's Signature: Bill Kelso

Date of installation: 6-1-2004

1/2 ps for PRAX-AIR test on vapor line

supreme - vapor 160 ft/lb — RT 6/30/04
product 160 ft/lb RT 6/30/04

regular - vapor 160 ft/lb RT 6/30/04
product 160 ft/lb — RT 6/30/04

OPW
EVR Phase I Equipment
Installation Check List
(Revised 03/15/04)

Components Installed

OPW 500 Series EVR Fill Spill Containment Bucket	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 500 Series EVR Vapor Spill Containment Bucket	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 2100 Series EVR Fill Spill Containment Bucket	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW 2100 Series EVR Vapor Spill Containment Bucket	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW FSA-400 Threaded Riser Adaptor (Face Seal Adaptor)		
On Fill Riser (Required)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
On Tank Probe Riser (Required)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
On Vapor Riser (Optional)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 61SO 400 EVR Series Overfill Prevention Valve	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW 61JSK Jack Screw Assembly	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW 61VSA Vapor Swivel Adaptor	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 61SALP Fill Swivel Adaptor	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 634TT Top Seal EVR Fill Cap	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW 1711T Top Seal EVR Vapor Cap	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OPW 634LPC Low Profile Top Seal EVR Fill Cap	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OPW 1711LPV Low Profile Top Seal EVR Vapor Cap	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Installation acknowledgment

Installed OPW FSA-400 Threaded Riser Adaptor (Face Seal Adaptor) on fill riser and tightened to 200 ft. lb.

Thread sealant compound used PERMATEX THREAD SEALANT

Installed OPW FSA-400 Threaded Riser Adaptor (Face Seal Adaptor) on tank probe rise and tightened to 200 ft. lb.

Thread sealant compound used SAME

Optional:

Installed OPW FSA-400 Threaded Riser Adaptor (Face Seal Adaptor) on vapor riser and tightened to 200 ft. lb.

Thread sealant compound used SAME

Installed OPW 2100 Series ☐ or 500 Series ☒ Fill spill containment bucket onto FSA-400 attached to fill riser and tightened to 200 ft. lb.

Thread sealant compound used SAME

Installed OPW 00 Series _____ or 500 Series ☒ vapor spill containment bucket onto
vapor riser and tightened to 200 ft. lb.
Thread sealant compound used SAME

Assembled 61SO-400C-EVR Series overfill prevention valve

☒ Used OPW supplied epoxy Yes _____ No _____
Applied epoxy: To upper 1" inside of top tube; under cinch head bolts and lock
washers; on threads of valve body at lower tube connection.

Yes _____ No _____

Allowed epoxy to cure for 24 hours before exposure to fuel or vapor

Yes _____ No _____

☒ Installed OPW 61SO 400C-EVR Series overfill prevention valve into fill spill
containment bucket. Yes _____ No _____

Alternative to 61SO:

Installed OPW 61T Straight Drop Tube into fill spill containment bucket.

Yes ☒ No _____

Installed OPW 61JSK Jack Screw assembly on top of 61SO 400C-EVR Series overfill
prevention valve or 61T Straight Drop Tube.

Yes ☒ No _____

Lock-Tite applied to screws Yes ☒ No _____

Screws tightened to 3+ ft. lb.

Installed faced off 4" NPT pipe nipple in fill spill containment bucket and tightened
nipple to 160 ft. lb.

Thread sealant compound used SAME

Tool used to install nipple OPW 61SA

Installed faced off 4" NPT pipe nipple in vapor spill containment bucket and tightened
nipple to 160 ft. lb.

Thread sealant compound used SAME

Tool used to install nipple OPW 61SA

Installed OPW 61 SALP Fill Swivel Adaptor onto faced off 4" NPT pipe nipple in fill
spill containment bucket and tightened fill adaptor to 160 ft. lb.

Thread sealant compound used SAME

Tool used to install nipple OPW 61SA

Installed OPW 61 VSA Vapor Swivel Adaptor onto faced off 4" NPT pipe nipple in
vapor spill containment bucket and tightened vapor adaptor to 160 ft. lb.

Thread sealant compound used SAME

Tool used to install nipple OPW 61SA

OPW 61 SA-Tool used to install OPW components Yes ☒ No _____

MAKE SURE THAT
YOUR SITE AND
CLIENT INFO IS
ACCURATE -
DOUBLE CHECK
WITH OFFICE IF
UNSURE

ARRIVAL CHECK LIST

# Tanks	2 Tanks/1 split
# Dispensers	4

TANK INFO

Tank Product	Volume	Empty/Water/Fuel
87 Tank	12K	Empty
91 Tank	6K	Empty
DSL Tank	6K	Empty

PIPING INFO

	TYPE (Manufacture)	Helium / Vacuum
Product Lines	Pieces	Tracer W
VR / Vent	Smith	Tracer W
Flex	Pieces	Tracer W
Spill Buckets	OPW	
Shear Valves	OPW	Tracer W
Who Performed Pre-test!!	Praxair Svcs	

**List Issues encountered on check list and how resolved
(Contractor corrected, Reviewed by PM, Ect,)**

[illegible]

Date:

NEW CONSTRUCTION ELD - JOB LOG SUMMARY

TYPE OF TEST (Pretest, Final, Leak locate, Retest)		Probe Install? (Yes/No)	
Job Number:	37275NC		
Client:	ED Staub & Sons	Contact:	Bill Kelso
Site Name:	Shell	Phone:	530 521 5038
Site Address:	1300 W. Wood st.	Site Contact:	
City, State:	Willows, Ca	Phone:	

Crew:

Site Lead: Clarence Sullivan

Crew: Roy Barrow

					Total HRS	Billable Hrs	Initial	
Start Date:	1-Jul-04	Start Time:	7:30	End Time:	22:30	14.25	14.25	
Day Two Date:	2-Jul-04	Start Time:	7:30	End Time:		7.5	7.5	
Day Three Date:		Start Time:		End Time:				
Day Four Date:		Start Time:		End Time:				

MAKE NOTES IF YOU HAVE ANY UNBILLABLE HOURS

Total Billable Hours	21.75	Total Detected Leaks	
TEST RESULTS	Pass	Fail	Notes per item (Leaks should be covered under Leak log)
Product Primary	Pass		All products pass
Product Secondary			N/A
VR Primary	Pass		Primary VR and VENTs pass
VR Secondary			N/A
UDCs -#	4	Pass	All UDCs pass
Tanks (Includes Sumps)	Pass		All tank sumps pass

COMMENTS: (Leaks, unbillable hours, site specific info)

No tracer detections in HSP samples - Total 2 leaks found and repaired both in 91TS

Form Completed By: Clarence Sullivan

Date:

CA#

97-1604

Hours Approved By:

Signature:

QA Review By:

Date:

Time:

Daily Activity Log				Job#	37275NC		
Site:	Shell	Client:	ED Staub & Sons		Client Contact	Bill Kelso	
Site Address:		1300 W. Wood st.		Willows, Ca		Contact #	530 521 5038
Date:	1-Jul	Day #	1			Log Completed By:	C Sullivan / 97-1604
Leak/Pass	Time	ITEM	Test	Tested	Sample ID	Rate: (ug/L - ppm)	Description
0	7:30	Note	Note	Note	Note		on-site, met with client, reviewed site, Michael Salin onsite
0	8:00	Note	Note	Note	Note		Start set up of test connections- VR and vent lines can not pull vac on line for inoculation - will use pressure
0	8:30	HSP	Note	Note	Note		Reviewed HSP layout
0	9:30	LS	Final	LS	Start LS	TRACER E = LS	Introduced at point midway between tanks
0	10:00	Note	Note	Note			Start Calibration
0	11:00	Note	Note	Note	Note		Calibration instrument Complete
0	11:21	LS	Final	LS	Confirm LS	leak	Sample collected at location were LS was introduced
0	11:45	LS	Final	LS	Confirm LS- HSP 2	ND- E	Sample collected out of HSP 2
0	12:36	HSP	BG	HSP 2	BG-HSP2 5-15ft	ND-A,W	Sample collected BG
0	12:51	HSP	BG	HSP 2	BG-HSP2 20-35ft	ND-A,W	Sample collected BG
0	13:04	LS	Final	LS	Confirm LS	ND-E	Sample resampled at point of LS introduction
0	13:22	HSP	BG	HSP 2	BG-HSP2-40-55ft	ND-A,W	Sample collected BG
0	13:34	HSP	BG	HSP 2	BG-HSP2-60-75ft	ND-A,W	Sample collected BG
0	13:40	LS	Final	LS	Inoc	TRACER E = LS	Re-introduce LS in HSP 3
3	13:45	LS	Final	HSP	Confirm LS at LS point	Leak E	Confirmed LS introduced OK
0	13:58	HSP	BG	HSP 2	BG HSP2-80-95ft	ND-A,W	Sample collected BG
3	14:00	VRPL	Final	INOC	INOC	Inoculated	Inoculated
3	14:10	87PL	Final	INOC	Inoc	Inoculated	Inoculated
3	14:20	91PL	Final	INOC	Inoc	Inoculated	Inoculated
3	14:30	DSLPL	Final	INOC	Inoc	Inoculated	Inoculated
0	14:45	VRPL	Final	INOC	VRPL-UDC1 ver	Leak W	Sample collected from shear valve UDC1

Daily Activity Log				Job#	37275NC		
Site:	Shell	Client:	ED Staub & Sons		Client Contact	Bill Kelso	
Site Address:	1300 W. Wood st.		Willows, Ca		Contact #	530 521 5038	
Date:	1-Jul	Day #	1			Log Completed By:	C Sullivan / 97-1604
0	15:02	HSP	LS	HSP1	LS HSP1-5ft	ND-A,W, E	Collected LS
0	15:13	HSP	LS	HSP1	LS HSP1-5-20ft	ND-A,W, E	Collected LS
0	15:24	HSP	LS	HSP1	LS HSP1-25-30ft	ND-A,W, E	Collected LS
0	15:40	HSP	LS	HSP1	LS HSP1-45-50ft	ND-A,W, E	Collected LS
0	15:57	HSP	LS	HSP1	LS HSP1-55-60ft	ND-A,W, leak tracer E	Collected LS
3	16:06	UDC	Final	UDC1-2	UDC1-2	ND-W	Sample from UDC
3	16:12	UDC	Final	UDC3-4	UDC3-4	ND-W	Sample from UDC
3	16:19	UDC	Final	UDC5-6	UDC5-6	ND-W	Sample from UDC
3	16:24	UDC	Final	UDC7-8	UDC7-8	ND-W	Sample from UDC
3	16:29	VRPL	Final	1	87FVRS-Vent Sump	ND-W	sample collected
3	16:30	87TK	Final	INOC	Inoc	Inoc=Tracer A	Inoc Tracer A into tank
3	16:30	91TK	Final	INOC	Inoc	Inoc=Tracer A	Inoc Tracer A into tank
3	16:30	DSLTK	Final	INOC	Inoc	Inoc=Tracer A	Inoc Tracer A into tank
0	16:37	LS	LS	HSP1	HSP1-65-70ft	ND-E	Collected LS
0	16:49	LS	LS	HSP1	HSP1-75-80ft	ND-E	Collected LS
0	17:02	LS	LS	HSP1	HSP1-85-90ft	ND-E	Collected LS
0	17:12	LS	LS	HSP1	HSP1-95-100ft	ND-E	Collected LS
0	17:25	LS	LS	HSP1	HSP1-105-110ft	ND-E	Collected LS
0	17:34	LS	LS	HSP1	HSP1-115-120ft	ND-E	Collected LS
0	17:45	LS	LS	HSP1	HSP1-125ft	ND-E	Collected LS
3	18:06	87Vent	Final	1	87Vent-87fvrs	ND-A,W	Sample from Vent secondary at 87FVRS
3	18:13	91Vent	Final	1	91Vent-91FVRS	ND-A,W	Sample from Vent secondary at 91FVRS
3	18:26	DSLVent	Final	1	DSLvent-DSLFS	ND-A,W	Sample from Vent secondary at DSL fill Sump
3	18:33	87PL	Final	1	87TS-UDC1- 1	ND-A,W	TS-UDC
3	18:40	87PL	Final	1	81TS-UDC1- 2	ND-A,W	TS-UDC
3	18:46	91PL	Final	1	91TS-UDC1- 1	ND-A,W	TS-UDC

Daily Activity Log				Job#	37275NC		
Site:	Shell	Client:	ED Staub & Sons		Client Contact	Bill Kelso	
Site Address:		1300 W. Wood st.		Willows, Ca	Contact #	530 521 5038	
Date:	1-Jul	Day #	1			Log Completed By:	C Sullivan / 97-1604
3	18:53	91PL	Final	1	91TS-UDC1 -2	ND-A,W	TS-UDC
3	18:59	DSLPL	Final	1	DSLTS-UDC5- 1	ND-A,W	TS-UDC
3	19:05	DSLPL	Final	1	DSLTS-UDC5- 2	ND-A,W	TS-UDC
3	19:11	VRPL	Final	1	VRPL-UDC 5-6	ND-A,W	87FVRS-UDC
3	19:17	VRPL	Final	1	VRPL-UDC 1-2	ND-A,W	87FVRS-UDC
3	19:22	VRPL	Final	1	VRPL-UDC 3-4	ND-A,W	87FVRS-UDC
3	19:28	VRPL	Final	1	VRPL- UDC7-8	ND-A,W	87FVRS-UDC
0	19:35	LS	LS	HSP1	HSP1-50ft	Leak	Sample to confirm LS
0	19:43	LS	LS	HSP1	HSP1-55ft	ND-E	Sample to confirm LS
0	19:52	LS	LS	HSP1	HSP1-60ft	ND-E	Sample to confirm LS
0	20:01	LS	LS	HSP1	HSP1-65ft	ND-E	Sample to confirm LS
0	20:09	LS	LS	HSP1	HSP1-8ft	ND-E	Sample to confirm LS
0	20:18	LS	LS	HSP1	HSP1-4ft	ND-E	Sample to confirm LS
0	21:33	LS	LS	HSP1	HSP1-45ft	ND-E	Sample to confirm LS
0	21:44	LS	LS	HSP1	HSP1-50ft	ND-E	Sample to confirm LS
0	21:53	LS	LS	HSP1	HSP1-55ft	ND-E	Sample to confirm LS
3	22:23	LS	LS	HSP2	HSP2-7ft	Leak	Sample to confirm LS
3	22:32	LS	LS	HSP2	HSP2-13ft	Leak	Sample to confirm LS
3	22:35	LS	Note	Note	Note		Two samples from the Inner Disp loop; found tracer E in sufficient quantities in both probes.
0	22:35	Note	Note	Note	Note		Off-site
Day Summary:			Tested all primary lines - products, vent and VR / Tested all UDCs - PASS				

Daily Activity Log				Job#	37275NC	
Site:	Shell		Client:	ED Staub & Sons	Client Contact	Bill Kelso
Site Address:		1300 W. Wood st.		Willows, Ca	Contact #	530 521 5038
Date:	2-Jul	Day #	2		Log Completed By:	C Sullivan - 97-1604
Leak/Pass	Time	ITEM	Test	Tested	Sample ID	Description
0	7:30	Note	Final	NOTE	NOTE	On-site began calibration; blowing out and covering sumps
0	8:52	Note	NOTE	NOTE	NOTE	GC Calibration Complete
3	9:48	HSP	Final	HSP1	HSP1-5-20ft	Sample collected from HSP
3	9:54	HSP	Final	HSP1	HSP1-25-40ft	Sample collected from HSP
3	10:02	HSP	Final	HSP1	HSP1-45-60ft	Sample collected from HSP
3	10:08	HSP	Final	HSP1	HSP1-65-80ft	Sample collected from HSP
3	10:14	91TK	Final	FVRS	91FVRS	Sample from Sump
1a	10:22	91TK	Final	TS	91 TS-1	Leak located in TS at riser to Tank. Tightened
3	10:34	87TK	Final	FVRS	87FVRS	Sample from Sump
3	10:44	87TK	Final	TS	87TS	Sample from Sump
3	10:51	DSLTK	Final	FS	DSLFS	Sample from Sump
3	11:12	DSLTK	Final	TS	DSLTS	Sample from Sump
3	11:26	HSP	Final	HSP1	HSP1-85-100ft	Sample collected from HSP
3	11:32	HSP	Final	HSP1	HSP1-105-120ft	Sample collected from HSP
3	11:40	HSP	Final	2-HSP	HSP2-5-20ft	Sample collected from HSP

Daily Activity Log				Job#	37275NC	
Site:	Shell		Client:	ED Staub & Sons	Client Contact	Bill Kelso
Site Address:		1300 W. Wood st.		Willows, Ca		Contact #
						530 521 5038
Date:	2-Jul	Day #	2			Log Completed By:
						C Sullivan - 97-1604
1b	11:49	91TK	Final	TS	91TS	Sample collected after one hr - second leak located at ball valve - contractor tightened and repaired
3	11:58	HSP	Final	2-HSP	HSP2-25-40ft	Sample collected from HSP
3	12:09	HSP	Final	2-HSP	HSP2-45-60ft	Sample collected from HSP
3	12:22	HSP	Final	2-HSP	HSP2-65-80ft	Sample collected from HSP
3	12:41	HSP	Final	2-HSP	HSP2-85-100ft	Sample collected from HSP
3	12:51	HSP	Final	2-HSP	HSP2-105-120ft	Sample collected from HSP
3	13:08	HSP	Final	2-HSP	HSP2-125-140ft	Sample collected from HSP
3	13:17	HSP	Final	2-HSP	HSP2-145ft	Sample collected from HSP
3	13:36	91TK	Final	TS	91TS	Sample after one hour - after repairs
3	14:00	HSP	Final	3-HSP	HSP3-5-20ft	Sample collected from HSP
3	14:06	HSP	Final	3-HSP	HSP3-25-40ft	Sample collected from HSP
3	14:17	HSP	Final	3-HSP	HSP3-45-60ft	Sample collected from HSP
3	14:23	HSP	Final	3-HSP	HSP3-65-80ft	Sample collected from HSP
3	14:30	HSP	Final	3-HSP	HSP3-85-100ft	Sample collected from HSP
3	14:37	HSP	Final	3-HSP	HSP3-105-120ft	Sample collected from HSP

Daily Activity Log				Job#		37275NC	
Site:	Shell	Client:		ED Staub & Sons		Client Contact	Bill Kelso
Site Address:		1300 W. Wood st.		Willows, Ca		Contact #	530 521 5038
Date:	2-Jul	Day #	2			Log Completed By:	C Sullivan - 97-1604
3	14:47	HSP	Final	4-HSP	HSP4-5-20ft	Sample collected from HSP	
3	14:54	HSP	Final	4-HSP	HSP4-25-40ft	Sample collected from HSP	
3	15:06	HSP	Final	4-HSP	HSP4-45-60ft	Sample collected from HSP	
3	15:18	HSP	Final	4-HSP	HSP4-65-80ft	Sample collected from HSP	
0	15:30	Note	NOTE	NOTE	NOTE	All systems pass	
0	16:00	Note	NOTE	NOTE	NOTE	Clean up- OFF SITE	
Day Summary:							

LEAK LOG				Job#	37275NC		
Site:	Shell	Client:	ED Staub & Sons		Client Contact	Bill Kelso	
Site Address:	1300 W. Wood st.		Willows, Ca		Contact #	530 521 5038	
Test Dates	7/1-2/04				Log Completed By:	C Sullivan / 91-1604	
Leak/Pass	Time	ITEM	Test	Tested	Sample ID	Rate: (ug/L - ppm)	Description
1a	10:22	91TK	Final	TS	91 TS-1	leak	Leak located in TS at riser to Tank. Tightened
1b	11:49	91TK	Final	TS	91TS	leak	Sample collected - second leak located at ball valve - contractor tightened and repaired

Praxair Services, Inc.

Technical Solutions for the Industrial World.

UCISCO



Tracer Research Corrocon

CERTIFICATION OF ELDSM TRACER TIGHT® TEST RESULTS

Date: 7/1-2/2004

Job # 37275NC

Prepared For:

ED Staub & Sons
PO Box 506
Tullylake Ca 96134

Site Info:

Shell
1300 W. Wood st.
Willows, Ca

Test Time Period 4/12-15/04

		TRACER	STATUS
Diesel Tank & Sumps		A	Pass
87 Tank & Sumps		A	Pass
91 Tank & Sumps		A	Pass
Piping	87 Primary	W	Pass
Piping	91 Primary	W	Pass
Piping	Vapor Recovery/ Vent - Primary	W	Pass / Pass
Piping	Diesel - Primary	W	Pass
Piping	Diesel - Vent - Primary	W	Pass
Dispenser Sumps	4	W	Pass

Praxair Services Inc. certifies that the tank and product distribution lines listed in the above table have been tested by means of Enhanced Tracer Tight®. According to EPA standard test procedures for evaluating leak detection methods, the Enhanced Tracer Tight® method is capable of detecting leaks of ≥ 0.005 gallons per hour with a Probability of Detection (PD) of 0.95 and Probability of false alarm of < 0.05

Tester: Clarence Sullivan CA Lic. # 97-1604

Signature: <See Original For Signature> Date:

I declare under penalty of perjury that I am a licensed tank tester in the State of California and that the information contained in this report is true and correct to the best of my knowledge.

The following criteria are used for the classification of leakage based on the presence or absence of tracer.

PASS

Criteria:
No Tracer Detected

FAIL

Criteria:
Tracer Detected

Office use only

Certification Confirmed by: _____ Date:

CNI

**Fair Oaks, California
August 16-17, 2004**

APPENDIX III

STAFF REPORT BY MR. MICHAEL SAHLIN, SWRCB
FINAL ELD TEST
CNI EVR PHASE I EO VR-104A
August 16-17, 2004
Safeway
5400 Dewey Drive
Fair Oaks, CA

In Attendance:

Mr. Michael Sahlin – SWRCB
Ms. Terrel Ferreira – ARB, Office of the Ombudsman
Mr. Lou Dinkler – ARB
Mr. Neil Nipper – ARB
Mr. Nahum Valdez – Fillner Construction, Inc.
Mr. Brian Quinley – Praxair Services Inc.
Mr. David Paszkiet – Praxair Services Inc.

This UST facility is located at the Northeast corner of Dewey Drive and Madison Avenue in Fair Oaks, California. The people listed above were at the facility at approximately 7:30 AM on August 16, 2004. Praxair Services Inc. (PSI) started setting up their equipment and prepared to conduct the gross helium test. At about 10:15 AM, Mr. Nahum Valdez of Fillner Construction Inc. started to install the spill bucket adapters and nipples on the tank risers so that PSI would be able to make connections to inoculate the tanks with tracer. Ms. Ferreira and Mr. Sahlin witnessed the installation of the spill buckets according to manufacturer's instructions. At 11:45 AM, PSI started the gross helium test. Problems were encountered on the regular unleaded spill bucket; the drain had a slight leak. The spill bucket was removed, cleaned, and replaced. The premium fill adapter had a slight leak because the set screws were not fully tightened, this also was fixed. Mr. Sahlin observed that both these problems were immediately fixed and the "Leak Simulation" was started about 1:45 PM by inoculating a 5 foot probe in the horizontal sampling probe (HSP) manhole with Tracer "E". The leak simulation tracer was found in sufficient concentration to establish the Enhanced TracerTight® test (often referred to as ELD) timetable at 18.5 hours for this UST facility. The product lines were then inoculated with Tracer "W" at 2:30 PM. The waiting period for the APT flex pipe is 10-20 minutes. (According to PSI Standard Operating Procedures, the wait time for flex pipe with small secondary volumes is 10-20 minutes, while the wait time is 20-40 minutes for rigid fiberglass pipe with larger secondary volumes.) At 3:00 PM air was blown through the secondary space of the product piping, and a small problem arose when PSI encountered water in the secondary space. This water was flushed out and air was blown through without any further delays. At approximately 5:00 PM all product and vapor lines passed. At 5:45 PM, all three tanks were inoculated with Tracer "A" and brought up to 0.5 pounds per square inch (psi) pressure.

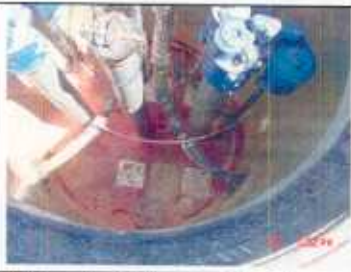









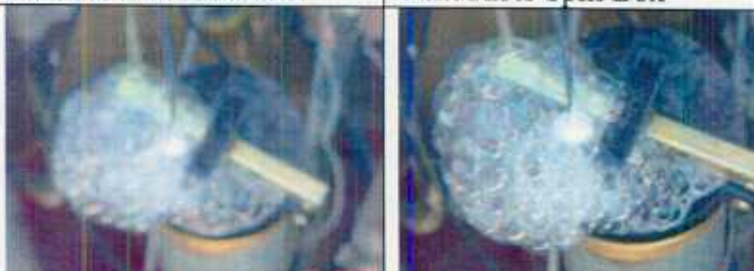
At 7:00 AM on August 17, 2004, PSI evacuated (i.e., blew the sumps out with air) and recovered them with plastic. Ms. Ferreira and Mr. Sahlin witnessed Fillner Construction Inc. fix the wire tension holders in the automatic tank gauge (ATG) caps. PSI had to release the pressure from the tank and re-pressure it after the ATG was fixed. Another problem was discovered on one of the fill caps on the diesel tank, and the fill cap was replaced. The cap on the "future Phase I" riser for the diesel was also leaking. The fill adapter was removed and replaced with a threaded cap. The only other difficulty encountered was that it was very hard to pull the nylon tubing through the HSP. CGRS was called and they came to the facility to pull the tubing. After these problems were fixed, the facility passed the ELD post-installation test at 6:00 PM on August 17, 2004.

See attachments:

(A) PSI Job Log for August 16-17, 2004

APPENDIX III

PHOTOS

		
Unleaded Sump (North Turbine) Product Line	Unleaded Sump (South Turbine) Product Line	Unleaded Fill Sump
		
Diesel Fill Sump	Diesel Line	IS Space Monitor – Diesel/Premium Tank(s)
		
Premium Fill Sump	Premium Product Line	Vent Riser Spill Box
		
HSP Manway	Leak at ATG Riser	

PROJECT INFO

JOB Number	37382NC	MAKE SURE THAT YOUR SITE AND CLIENT INFO IS ACCURATE - DOUBLE CHECK WITH OFFICE IF UNSURE
SITE NAME	Safeway	
SITE ADDRESS	5400 Dewey Drive	
SITE - CITY, STATE, ZIP	Fair Oaks, CA	
SITE CONTACT	Naham Valdez	
SITE CONTACT PHONE#	() 417-4111	
CONTRACT CLIENT	CGRS	
CLIENT ADDRESS	P.O.Box 1489	
CLIENT CITY, STATE, ZIP	Fort Collins, CO 80524	
CLIENT CONTACT	Brian Greene	
CONTACT PHONE #	(970) 420-6822	

ARRIVAL CHECK LIST

# Tanks	3
# Dispensers	6

TANK INFO

Tank Product	Volume	Empty/Water/Fuel
87	20,000	Empty
91	10,000	Empty
DSL	10,000	Empty

PIPING INFO

	TYPE (Manufacture)	Helium / Vacuum
Product Lines	Western Fiberglass Co-Flex	No/Yes
VR / Vent	Ameron	No/Yes
Flex	TiteFlex	Yes/Yes
Spill Buckets	CNI	No/No
Shear Valves		
Who Performed Pre-test!!	Praxair Services Inc./ and CGRS	
UDC Dimension's -(length/depth/width)		
Sump Dimension's - (Diameter/Depth)		

List Issues encountered on check list and how resolved:
(Contractor corrected, Reviewed by PM, Ect,)

Form Completed By: _____

Date: _____

NEW CONSTRUCTION ELD - JOB LOG SUMMARY

TYPE OF TEST (Pretest, Final, Leak locate, Retest)		Final	Probe Install? (Yes/No)	No
Job Number:	37382NC			
Client:	CGRS	Contact:	Brian Greene	
Site Name:	Safeway	Phone:	(970) 420-6822	
Site Address:	5400 Dewey Drive	Site Contact:	Naham Valdez	
City, State:	Fair Oaks, CA	Phone:	910 417-4111	

Crew: Site Lead: Bryan QuinleyCrew: David Paszkiet

					Total HRS	Billable Hrs	Initial
Start Date:	8/16/04	Start Time:	7:45	End Time:	7:30	11.75	11.75
Day Two Date:	8/17/04	Start Time:	7:00	End Time:	8:00	13	13
Day Three Date:		Start Time:		End Time:			
Day Four Date:		Start Time:		End Time:			

MAKE NOTES IF YOU HAVE ANY UNBILLABLE HOURS

Total Billable Hours	24.75	Total Detected Leaks	7
TEST RESULTS	Pass	Fail	Notes per item (Leaks should be covered under Leak log)
Product Primary	X		
Product Secondary	na		
VR Primary	X		
Vent primary	X		
UDCs -#	6	X	
Tanks (Includes Sumps)	X		see leak log

COMMENTS: (Leaks, unbillable hours, site specific info)

--

Form Completed By: Bryan Quinley Date: CA# 03-1637

Hours Approved By: Signature: Date:

QA Review By: Date: Time:

Daily Activity Log				Job#	37382NC	
Site:	Safeway	Client:	CGRS			
Site Address:	5400 Dewey Drive		Fair Oaks, CA		Contact #	
TEST DATES		8/16/04	# DAYS	1		
Date:	Leak/Pas s	Time	ITEM	Test	Tested	Description
8/16/04	0	7:45				Arrived on Site
8/16/04	0	7:50				Site Review with Contractor
8/16/04	0	8:00				Tailgate Safety Meeting
8/16/04	0	8:05				Discussion with State and County Officials on Today's Activities.
8/16/04	0	8:10				Started Setup for Primary Inoculation and Secondary Sampling
8/16/04	0	9:20				begin standardizing
8/16/04	0	8:30				prod lines have helium on them, giving them soap test
8/16/04	0	10:30				contractor done with the sump work
8/16/04	0	11:30				soap down all the udcos found no leaks
8/16/04	0	12:00	87 tk	pretest	fvs/ts	fill 87 tk to .5 psi to test all fittings and buckets with soap
8/16/04	0	12:10	dsl tk	pretest	fvs/ts	fill dsl tk to .5 psi to test all fittings and buckets with soap
8/16/04	0	12:15	91 tk	pretest	fvs/ts	fill 91 tk to .5 psi to test fittings and buckets in sumps
8/16/04	0	12:20	prod lines			begin process of vacuuming out the lines for innoc.
8/16/04	0	12:05	87 tk			the fill/spill bucket is leaking, the drain valve
8/16/04	0	12:15	91 tk			the fill/spill bucket is leaking, the brass collar was not tight enough
8/16/04	0	1:45	LS			inject 30 ccs of tracer E 438 into 5' LS probe
8/16/04	0	1:55	hsp	ls	ls	collect sample to see if tracer E got into the tank pit
8/16/04	0	1:40				vacuuming of all prod lines complete
8/16/04	0	2:10	ls	ls	ls	collect sample from the LS probe
8/16/04	0	2:20	dsl pl	final	1	innoc loine to 40 psi, use vac to inoc
8/16/04	0					innoc all product and vr lines from disp 6
8/16/04	0	2:40				could not get air through the 87 2nd
8/16/04	0	3:00				we accidentally sampled a 2nd that had not been had the primary innoc.

Daily Activity Log				Job#	37382NC		
Site:	Safeway	Client:	CGRS		Client Contact		
Site Address:		5400 Dewey Drive		Fair Oaks, CA		Contact #	
TEST DATES		8/16/04	# DAYS	1		Log Completed By:	Quinley/Paszkiel
8/16/04	3	3:15	dsl pl	final	1	dsl 2nd from TS-udc 1	collect sample bag by blowing air-8 gal
8/16/04	0	4:20	dsl pl	final	1	dsl 2nd from TS-udc 6	having trouble with getting getting air through the 2nds
8/16/04	0	3:30	91 pl	final	1		innoc the 91 pl to 40 psi using vac
8/16/04	3	3:45	91 pl	final	1	91 2nd TS-udc 1	collect sample by blowing air- 9gal
8/16/04	3	3:50	91pl	final	1	91 2nd TS-udc 6	collect sample by blowing air- 7gal
8/16/04	0	3:55	87 pl	final	1		innoc 87 pl to 40 psi-use vac
8/16/04	3	4:15	87 pl	final	1	87 2nd TS-udc 1	collect sample by blowing air- 7gal
8/16/04	3	4:20	87 pl	final	1	87 2nd TS-udc 6	collect sample by blowing air-8 gal
8/16/04	0	4:40	vr/v	final	1		begin to innoc vr/v line
8/16/04	0	4:58	vr/v	final	1	verify W at 87 vent	float bag sample to verify W
8/16/04	0	5:00	vr/v	final	1	verify W at 91 vent	float bag sample to verify W
8/16/04	0	5:03	vr/v	final	1	verify W at udc 5	float bag sample to verify W
8/16/04	0	5:10	vr/v	final	1	verify W at udc 4	float bag sample to verify W
8/16/04	3	5:40	vr/v	final	1	vr 2 87fvs-91fvs	collect bag sample by blowing air-
8/16/04	3	5:45	vr/v	final	1	vr 2 87fvs-udc 3	collect bag sample by blowing air-
8/16/04	3	5:48	vr/v	final	1	vr 2 87 fvs-udc 4	collect bag sample by blowing air-
8/16/04	3	5:50	vr/v	final	1	vr 87 fvs-udc 2	collect bag sample by blowing air-
8/16/04	3	5:53	vr/v	final	1	vr 87 fvs-udc 5	collect bag sample by blowing air-
8/16/04	3	5:55	vr/v	final	1	vr 87 fvs-udc 1	collect bag sample by blowing air-
8/16/04	3	5:58	vr/v	final	1	vr 87 fvs-udc 6	collect bag sample by blowing air-
8/16/04	3	6:08	vent	final	1	vent 2nd 87fvs-vent	collect bag sample by blowing air-
8/16/04	3	6:10	vent	final	1	vr 2nd 91fvs-vent	collect bag sample by blowing air-
8/16/04	0	5:55	dsl tk	final	1		innoc dsl tk to .5 psi
8/16/04	0	6:00	87 tk	final	1		innoc 87 tk to .5psi
8/16/04	0	6:05	91 tk	final	1		innoc 91 tk .5 psi
8/16/04	0	6:40	ls		soil	LS 1	collect sample from HSP to look for LS
8/16/04	0	6:42	ls		soil	LS 2	collect sample from HSP to look for LS
8/16/04	0	6:45	ls		soil	LS 3	collect sample from HSP to look for LS
8/16/04	0	6:50	ls		soil	LS 4	collect sample from HSP to look for LS
8/16/04	0	7:30					offsite

Daily Activity Log				Job#	37382NC	
Site:	Safeway	Client:	CGRS		Client Contact	
Site Address:	5400 Dewey Drive		Fair Oaks, CA		Contact #	
TEST DATES	8/16/04	# DAYS	1		Log Completed By:	Quinley/Paszkiel
Day Summary:						

Daily Activity Log				Job#	37382		
Site:	Safeway	Client:	CGRS		Client Contact		
Site Address:	5400 Dewey Drive		Fair Oaks, CA		Contact #		
TEST DATES	8/17/04	# DAYS	2		Log Completed By:	Quinley/Paszkiel	
Date:	Leak/Pas s	Time	ITEM	Test	Tested	Sample ID	Description
8/17/04	0	7:00					Arrived on Site
8/17/04	0	7:05					Tailgate Safety Meeting
8/17/04	0	7:10					Started Prep for DSL Vent Primary Innoculation and Sump/UDC Sampling
8/17/04	0	8:05	LS	HSP	soil	LS 1	Sampled for Leak Sim.
8/17/04	0	8:08	LS	HSP	soil	LS 2	Sampled for Leak Sim.
8/17/04	0	8:12	LS	HSP	soil	LS 3	Sampled for Leak Sim.
8/17/04	0	8:15	LS	HSP	soil	LS 4	Sampled for Leak Sim.
8/17/04	0	8:30					begin bowing out sumps and cover
8/17/04	0	9:15					All UDC's were Blown Out and Covered.
8/17/04	1	9:20					Soap Test found Leak on the ATG Cap's Electrical Fitting in the 87 TS and DSL TS.
8/17/04	0	9:40	87 tk				release pressure from the 87 tk to make repairs
8/17/04	0	9:30	dsl vent				would not hold vacuum or pressure on the primary, there is a leak in the riser assoc. with the vent line that is leaking, but the line would hold now pressure, will blow bag of 2nd to check, the extractor plug may not be holding either
8/17/04	0	9:40					contractor begin to fix all the leaks
8/17/04	0						
8/17/04	3	10:40	udc	final	udc	udc 1	collect sample from udc
8/17/04	3	10:42	udc	final	udc	udc 2	collect sample from udc

Daily Activity Log				Job#	37382NC		
Site:	Safeway	Client:	CGRS		Client Contact		
Site Address:	5400 Dewey Drive		Fair Oaks, CA		Contact #		
TEST DATES	8/16/04	# DAYS	1		Log Completed By:	Quinley/Paszkiel	
8/17/04	3	10:44	udc	final	udc	udc 3	collect sample from udc
8/17/04	3	10:46	udc	final	udc	udc 4	collect sample from udc
8/17/04	3	10:48	udc	final	udc	udc 5	collect sample from udc
8/17/04	3	10:53	udc	final	udc	udc 6	collect sample from udc
8/17/04	0	11:00					trying to figure out where the hsp go, there is some questions, so CGRS is sending some one out
8/17/04	0	11:55	91 tk	final	TS		blow out and cover 91 TS
8/17/04	0	12:05	91 tk	final	FVS		blow out and cover 91 FVS
8/17/04	0	12:05					contractor still fixing the leaks
8/17/04	0	12:10					begin taking HSP samples that follow product lines
8/17/04	0	12:55	91 tk	final	TS	91 TS sample	collect sample from the TS
8/17/04	0	12:58	91 tk	final	FVS	91 FVS sample	collect sample from the FVS
8/17/04	0	1:20	dsl vent				seemed to have dsl vent fixed
8/17/04	1	1:25	87 tk				87 tk atg cap and gramet still leaking
8/17/04	0	2:20	dsl vent	final	1		finally got vent line to hold, innoc to .5psi byh using vac
8/17/04	0	2:20	tank sumps				dsl, 91 atg caps still leaking; see leak log
8/17/04	0	2:45					contractor can not get the atg caps to seal, always leak at .4 psi
8/17/04	3	3:00	dsl vent	final	1	dsl vent 2nd fvs-vent	collect bag sample by blowing air-5 gal
8/17/04	3	12:30	HSP	final	soil	hsp d6-d2 5-20'	Sampled HSP from Disp6 to Disp2 (5'-20')
8/17/04	3	12:33	HSP	final	soil	hsp d6-d2 25-40'	Sampled HSP from Disp6 to Disp2 (25'-40')
8/17/04	3	12:36	HSP	final	soil	hsp d6-d2 45-60'	Sampled HSP from Disp6 to Disp2 (45'-60')
8/17/04	3	12:41	HSP	final	soil	hsp d6-d2 65-80'	Sampled HSP from Disp6 to Disp2 (65'-80')
8/17/04	3	12:45	HSP	final	soil	hsp d6-d2 85'	Sampled HSP from Disp6 to Disp2 (85')
8/17/04	3	13:12	HSP	final	soil	hsp d3-d5 5-20'	Sampled HSP from Disp3 to Disp5 (5'-20')
8/17/04	3	13:17	HSP	final	soil	hsp d3-d5 25-40'	Sampled HSP from Disp3 to Disp5 (25'-40')
8/17/04	3	13:22	HSP	final	soil	hsp d3-d5 45-60'	Sampled HSP from Disp3 to Disp5 (45'-60')
8/17/04	3	13:26	HSP	final	soil	hsp d3-d5 65-80'	Sampled HSP from Disp3 to Disp5 (65'-80')
8/17/04	3	13:30	HSP	final	soil	hsp d3-d5 85-90'	Sampled HSP from Disp3 to Disp5 (85'-90')
8/17/04	3	14:10	HSP	final	soil	hsp d1-d3 5-20'	Sampled HSP from Disp1 to Disp3 (5'-20')
8/17/04	3	14:15	HSP	final	soil	hsp d1-d3 25-40'	Sampled HSP from Disp1 to Disp3 (25'-40')

Daily Activity Log				Job#	37382NC		
Site:	Safeway	Client:	CGRS		Client Contact		
Site Address:	5400 Dewey Drive		Fair Oaks, CA		Contact #		
TEST DATES	8/16/04	# DAYS	1		Log Completed By:	Quinley/Paszkiel	
8/17/04	3	14:20	HSP	final	soil	hsp d1-d3 45-60'	Sampled HSP from Disp1 to Disp3 (45'-60')
8/17/04	3	14:25	HSP	final	soil	hsp d1-d3 65-75'	Sampled HSP from Disp1 to Disp3 (65'-75')
8/17/04	3	15:00	HSP	final	soil	hsp tk pit-d6 5-20'	Sampled HSP from Tank Pit to Disp6 (5'-20')
8/17/04	3	15:04	HSP	final	soil	hsp tk pit-d6 25-40'	Sampled HSP from Tank Pit to Disp6 (25'-40')
8/17/04	3	15:08	HSP	final	soil	hsp tk pit-d6 45-60"	Sampled HSP from Tank Pit to Disp6 (45'-60')
8/17/04	3	15:12	HSP	final	soil	hsp tk pit-d6 65-80'	Sampled HSP from Tank Pit to Disp6 (65'-80')
8/17/04	3	15:16	HSP	final	soil	hsp tk pit-d6 85-100'	Sampled HSP from Tank Pit to Disp6 (85'-100')
8/17/04	3	15:20	HSP	final	soil	hsp tk pit-d6 105-120'	Sampled HSP from Tank Pit to Disp6 (105'-120')
8/17/04	3	15:25	HSP	final	soil	hsp tk pit-d6 125-140'	Sampled HSP from Tank Pit to Disp6 (125'-140')
8/17/04	3	15:30	HSP	final	soil	hsp tk pit-d6 145-155'	Sampled HSP from Tank Pit to Disp6 (145'-155')
8/17/04	0	16:05	91 tk	final	TS		blow out and cover sump
8/17/04	0	16:10	dsl tk	final	ts		blow out and cover sump
8/17/04	0	16:13	dsl tk	final	fvs		blow out and cover sump
8/17/04	0	16:16	87 tk	final	ts		blow out and cover sump
8/17/04	0	16:20	87 tk	final	fvs		blow out and cover sump
8/17/04	0						from 12:30 to 4:00 filled each tank at least 3 times with helium to see if we fixed atg caps, the leak rate s right at the limit. We bagged the atg to make sure nothing else in the sumps was leaking
8/17/04	3	5:05	91 ts	final	ts	91 ts	collect sump sample
8/17/04	3	5:08	dsl ts	final	ts	dsl ts	collect sump sample
8/17/04	3	5:12	dsl fvs	final	fvs	dsl fvs	collect sump sample
8/17/04	3	5:15	87 ts	final	ts	87 ts	collect sump sample
8/17/04	3	5:18	87 fvs	final	FVS	87 fvs	collect sump sample
8/17/04	3	5:33	vent	final	udc	vent udc	colect sump udc sample
8/17/04	3	17:08	HSP	final	soil	hsp 87tk loop 5-20'	Sampled HSP from 87 Tank Loop (North to South); 5'-20'
8/17/04	3	17:12	HSP	final	soil	hsp 87tk loop 25-40'	Sampled HSP from 87 Tank Loop (North to South); 25'-40'
8/17/04	3	17:16	HSP	final	soil	hsp 87tk loop 45-60'	Sampled HSP from 87 Tank Loop (North to South); 45'-60'

Daily Activity Log				Job#	37382NC		
Site:	Safeway		Client:	CGRS		Client Contact	
Site Address:		5400 Dewey Drive		Fair Oaks, CA		Contact #	
TEST DATES		8/16/04	# DAYS	1		Log Completed By:	Quinley/Paszkiel
8/17/04	3	17:20	HSP	final	soil	hsp 87tk loop 65-80'	Sampled HSP from 87 Tank Loop (North to South); 65'-80'
8/17/04	3	17:24	HSP	final	soil	hsp 87tk loop 85-100'	Sampled HSP from 87 Tank Loop (North to South); 85'-100'
8/17/04	3	17:28	HSP	final	soil	hsp 87tk loop 105-110'	Sampled HSP from 87 Tank Loop (North to South); 105'-110'
8/17/04	3	17:48	HSP	final	soil	hsp 91tk loop 5-20'	Sampled HSP from 91 Tank Loop (North to South); 5'-20'
8/17/04	3	17:52	HSP	final	soil	hsp 91tk loop 25-40'	Sampled HSP from 91/DSL Tank Loop (North to South); 25'-40'
8/17/04	3	17:56	HSP	final	soil	hsp 91tk loop 5-20'	Sampled HSP from 91/DSL Tank Loop (North to South); 45'-60'
8/17/04	3	18:00	HSP	final	soil	hsp 91tk loop 5-20'	Sampled HSP from 91/DSL Tank Loop (North to South); 65'-80'
8/17/04	3	18:04	HSP	final	soil	hsp 91tk loop 5-20'	Sampled HSP from 91/DSL Tank Loop (North to South); 85'-100'
8/17/04	3	18:08	HSP	final	soil	hsp 91tk loop 5-20'	Sampled HSP from 91/DSL Tank Loop (North to South); 105'-110'
8/17/04	0	18:30					begin clean up and breakdown
8/17/04	0	8:00					offsite
8/17/04	0						
8/17/04	0						
8/17/04	0						
8/17/04	0						
8/17/04	0						
8/17/04	0						

Day Summary:

LEAK LOG					Job#	37382NC		
Site:		Safeway		Client:	CGRS		Client Contact	Brian Greene
Site Address:		5400 Dewey Drive		Fair Oaks, CA		Contact #	(970) 420-6822	
Test Dates							Log Completed By:	
DATE	Leak/Pass	Time	ITEM	Test	Tested	Sample ID	Rate: (ug/L - ppm)	Description
	0							
	0							

Cut and paste leak info from daily logs

8/16/04

1. The 87 fill/spill drain is leaking
2. The 91 fill/spill bucket is leaking, the brass collar not tight

8/17/04

1. 87 fvs atg riser the top gramet
2. DSL fvs the atg riser the top gramet
3. DSL the riser to the vent line cap is leaking-repaired
4. 87 atg cap still leaking
5. Dsl atg riser still some small bubbles
- 6&7. Dsl and 91 atg cap still leaking; leaking from the rubber o ring in the cap to collar

Praxair Services, Inc.

Technical Solutions for the Industrial World.

UCISCO



Tracer Research Corrocon

CERTIFICATION OF ELDSM TRACER TIGHT® TEST RESULTS

Date: 8/16-17/04

Job # 37382NC

Prepared For:

CGRS

P.O.Box 1489

Fort Collins, CO 80524

Site Info:

Safeway

5400 Dewey Drive

Fair Oaks, CA

Test Time Period 8/16-17/04

SYSTEM	TRACER	STATUS
Diesel Tank & Sumps	A	Pass
87 Tank & Sumps	A	Pass
91 Tank & Sumps	A	Pass
Piping 87 Primary	W	Pass
Piping 91 Primary	W	Pass
Piping Vapor Recovery/ Vent - Primary	W	Pass / Pass
Piping Diesel - Primary	W	Pass
Piping Diesel - Vent - Primary	W	Pass
Dispenser Sumps	W	Pass

Praxair Services Inc. certifies that the tank and product distribution lines listed in the above table have been tested by means of Enhanced Tracer Tight®. According to EPA standard test procedures for evaluating leak detection methods, the Enhanced Tracer Tight® method is capable of detecting leaks of ≥ 0.005 gallons per hour with a Probability of Detection (PD) of 0.95 and Probability of false alarm of < 0.05

Tester: Bryan Quinley CA Lic. # 03-1637

Signature: <See Original For Signature> Date:

I declare under penalty of perjury that I am a licensed tank tester in the State of California and that the information contained in this report is true and correct to the best of my knowledge.

The following criteria are used for the classification of leakage based on the presence or absence of tracer.

PASS

Criteria:

No Tracer Detected

FAIL

Criteria:

Tracer Detected

Office use only

Certification Confirmed by: Date:

PHIL-TITE

**Wilton, California
October 29-30, 2004**

APPENDIX III

STAFF REPORT BY MR. MICHAEL SAHLIN, SWRCB
FINAL ELD TEST
PHIL-TITE EVR PHASE I EO VR-101-D
October 29-30, 2005
Wilton Chevron
8995 Grant Line Road
Elk Grove (Wilton), CA

In Attendance:

Mr. Michael Sahlin – SWRCB
Mr. Vince Bunac – ARB
Mr. Roy Walker – Town & Country Construction
Mr. Nick Poynter – Praxair Services Inc.
Mr. Helio Diaz – Praxair Services Inc.
Mr. Matt Thomas – Shirley Environmental

This new UST facility is located on the Southeast corner of Grant Line and Wilton Roads. The facility is branded a Chevron, but is privately owned. On August 5, 2004, Mr. Vince Bunac witnessed the installation of the Phil-Tite spill buckets at the proper torque settings (see attached e-mail). On August 26, 2004, Shirley Environmental conducted a helium pre-test on the system. The pre-test revealed that the shear valves leaked at the dispensers. According to Mr. Roy Walker of Town & Country Construction, OPW came out and re-sealed all the leaking shear valves (see attached photos).

On October 29, 2004, Praxair Services Inc. (PSI) arrived on-site at 7:00 AM and started to set up their test equipment. At 8:00 AM, PSI introduced of Tracer “E” into the backfill to start the “Leak Simulation” phase of testing. PSI then began to set up for the gross helium test of the UST system. The helium test was competed with no detection of helium outside the UST system. At 12:30 PM, PSI inoculated the tanks with Tracer A and the tanks were pressurized to 0.5 pounds per square inch (psi). (Tanks at the facility include an 20,000-gallon 87 tank, a 10,000-gallon 92 tank, and a 10,000-gallon diesel tank. The product piping was inoculated with Tracer “W” and pressurized to 40 psi. The vent and vapor recovery piping, including the tank vents, were inoculated with Tracer “W” and pressurized to 0.5 psi. The leak simulation tracer was found in sufficient concentration to establish the Enhanced TracerTight® test (often referred to as ELD) timetable at 9 hours after inoculation of this UST facility. Air was blown throughout the secondary containment system and samples were collected per the standard operating procedures (SOPs) from the sumps, under-dispenser containment, and the secondary containment of the product, vent, and vapor piping. PSI left the facility at 6:30 PM. The only difficulty encountered at this facility was pulling the string and vinyl tubing through the horizontal sampling probe (HSP) piping, located in the product piping trench. Upon evaluation of the vent HSP piping, it was determined that the product piping was located within 10-feet of the vent HSP piping, which meets PSI’s SOP. (According to PSI’s third-party certification, the radius of influence of each probe is 10 feet.) At 2:00 PM on October 30, 2004 the rest of the HSPs were sampled and the facility passed the ELD test.

See attachments:

- (A) Photos of UST facility
- (B) Praxair Job Log for October 29, 30, 2004
- (C) August 5, 2004 e-mail from Mr. Vince Bunac, ARB

APPENDIX III

PHOTOS



SW looking NE



SE looking NW



West looking East through vent



Vent piping



South looking North at Tank Pit



SW looking NE



Diesel Fill



2 psi on vents




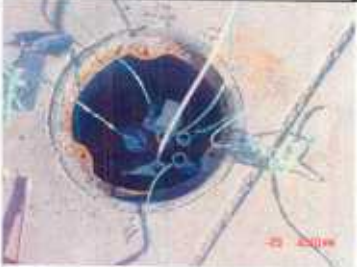




Diesel Fill, .5 psi



92 Fill, .5 psi

APPENDIX III

	
Shear Valves re-doped by manufacturer (OPW) to seal	
	
New Wayne Dispenser	Healy VP 1000 Assist Pump
	
Healy Nozzle F4404	HSP manhole in Tank Pit Area
	
Veeder Root TLS350	DW Brine Filled Interstitial Space & Sensor
	
Top of FE Petro Turbine	Turbine and ball valve assembly

PROJECT INFO

JOB Number	37561NC
SITE NAME	Chevon
	8995 Grant Line Road
	Elk Grove, California
	Roy Walker (town and Country)
	916-636-9500
CONTRACT CLIENT	Shirley
CLIENT ADDRESS	9595 Lucas Ranch Road
CLIENT CITY, STATE, ZIP	Rancho Cucamonga, CA
CLIENT CONTACT	April weems
CONTACT PHONE #	
TEST (Final, Pretest, Retest, Leak locate)	Final

**MAKE SURE THAT YOUR
SITE AND CLIENT INFO
IS ACCURATE**

**DOUBLE CHECK WITH
OFFICE IF UNSURE**

ARRIVAL CHECK LIST

# Tanks	3
# Dispensers	6

TANK INFO

Tank Product	Volume	Empty/Water/Fuel
87	20,000	empty
91	10,000	empty
DSL	10,000	empty

PIPING INFO

	TYPE (Manufacture)	Helium / Vacuum
Product Lines	Smith	
	Smith	
Flex	fire-rated	
Spill Buckets	Spill-tight	
Shear Valves		
IF FINAL - Who Performed Pre-test!!		Shirley
UDC Dimension's -(length/depth/width)		
Sump Dimension's - (Diameter/Depth)		
TYPE - TANK INTERSTICIAL (Brine/ Empty)		

List Issues encountered on check list and how resolved:
(Contractor corrected, Reviewed by PM, Ect,)

Form Completed By:

Date:

NEW CONSTRUCTION ELD - JOB LOG SUMMARY

TYPE OF TEST (Pretest, Final, Leak locate, Retest) =		Final	Probe Install? (Yes/No)	NO
Job Number:	37561NC			
Client:	Shirley	Contact:	April weems	
Site Name:	Chevon	Phone:	0	
Site Address:	8995 Grant Line Road	Site Contact:	Roy Walker (town and Country)	
City, State:	Elk Grove, California	Site Phone:	916-636-9500	

Crew:

Site Lead: Nick Poynter

Crew: Hello Diaz

				Total HRS	Billable Hrs	Initial
Start Date:	10-29-04	Start Time: 0700	End Time: 1830	11.5	11.5	
Day Two Date:	10-30-04	Start Time:	End Time: 1430	7	7	
Day Three Date:		Start Time:	End Time:			
Day Four Date:		Start Time:	End Time:			
Day Five Date:		Start Time:	End Time:			

MAKE NOTES IF YOU HAVE ANY UNBILLABLE HOURS

Total Billable Hours		18.5			Total Detected Leaks				0
TEST Complete	LINES			TANK			Tracer/He	Brine Start	Brine End
	Primary	Secondary	Vent	TS	FVRS	TI	Tank / Line	Start (in)	End (in)
87	Pass	N/A	Pass	Pass	Pass	Pass	A/W	N/A	N/A
91	Pass	N/A	Pass	Pass	Pass	Pass	A/W	N/A	N/A
DSL	Pass	N/A	Pass	Pass	N/A	Pass	A/W	N/A	N/A
0									
0									
VR / Vent	Pass	N/A							
UDCs - #	6	Pass							
HSP / PROBES - #	HSP	Pass							
			# Samples	21					

COMMENTS: (Leaks, unbillable hours, site specific info)

Form Completed By:	Nick Poynter	Date:	10-30-04	State Lic #	04-1686
Hours Approved By:		Signature:		Date:	
QA Review By:		Date:		Time:	

Daily Activity Log				Job#		37561NC	
Site:	Chevron	Client:	Shirley		Client Contact	April weems	
Site Address:		8995 Grant Line Road		Elk Grove, California		Contact #	0
TEST DATES :		10-29/10-30		# DAYS=	2	Log Completed By: Nick Poynter	
Date:	Leak/Pass	Time	ITEM	Test	Tested	Sample ID	Description (How collected, Volume Collected, Complete Notes)
10-29-04	0	0700	Note	Note	Note	Note	Arrived on site.
10-29-04	0	715	Note	Note	Note	Note	Difficulty entering area because of recent rain.
10-29-04	0	0730	Note	Note	Note	Note	Brought trailer on site and began conducting site survey.
10-29-04	0	0800	leak-sim	Inoc	Inoc	Inoc	30 ccs E438 purged into vent line hsp @ 15'.
10-29-04	0	0745	Note	Note	Note	Note	Began setting up guages, fittings and secondary whips.
10-29-04	0	0956	TK	BU	1	Inoc	All 3 tanks pressurized to 0.5 psi TRC-P and sumps covered.
10-29-04	0	1007	PL	BU	1	Inoc	All 3 product lines pressurized to 50 psi TRC P
10-29-04	0	1020	VR	BU	1	VR - Confirm	VR line pressurized to 5 psi. VR purged at vent riser and remaining dispensers until TRC-P confirmed.
10-29-04	0	1040	PL	BU	1	PL-Confirm	TRC-P confirmed throughout the system. All sumps covered.
10-29-04	0	1105	Note	Note	Note	Note	tester- vacuum and calibration validated.
10-29-04	Pass	1120	UDC	BU	1	UDC1-2	TRC-P
	Pass	1121	UDC	BU	1	Udc-3-4	TRC-P
	Pass	1122	UDC	BU	1	UDC5-6	TRC-P
	Pass	1123	UDC	BU	1	UDC7-8	TRC-P
	Pass	1124	UDC	BU	1	UDC9-10	TRC-P
	Pass	1125	UDC	BU	1	UDC11-12	TRC-P
	Pass	1150	87 Tank	BU	1	87FVRS	TRC-P
	Pass	11:52	87 Tank	BU	1	87TS	TRC-P
	Pass	11:54	91 Tank	BU	1	91FVRS	TRC-P
	Pass	11:56	91 Tank	BU	1	91TS	TRC-P
	Pass	11:58	DSL Tank	BU	1	DSLFS	TRC-P
	3	12:00	DSL Tank	BU	1	DSLTS	TRC-P
	0	12:15	87TK	Final	1	Inoc	Inoc - A874
	0	12:17	91TK	Final	1	Inoc	Inoc - A874
10-29-04	0	1221	DSLTK	Final	1	Inoc	Tanks inoculated with Tracer A874. 87=2 cans.
10-29-04	0	1230	Note	Note	Note	Note	Transfilling W cylinder.
10-29-04	0	13:00	87PL	Final	1	Inoc	Product lines vacuumed to 30" and pressurized to 40 psi with Tracer W.

Daily Activity Log				Job#	37561NC		
Site:	Chevon	Client:	Shirley	Client Contact	April weems		
Site Address:	8995 Grant Line Road			Elk Grove, California	Contact #	0	
	TEST DATES :	10-29/10-30	# DAYS=	2		Log Completed By: Nick Poynter	
10-29-04	0	13:05	91PL	Final	1	Inoc	Product lines vacuumed to 30" and pressurized to 40 psi with Tracer W.
10-29-04	0	13:10	DSLPL	Final	1	Inoc	Product lines vacuumed to 30" and pressurized to 40 psi with Tracer W.
10-29-04	0	1315	VR	Final	1	Inoc	VR line pressurized to 5 psi and purged until tracer is throughout system. Repressurized to 0.5 psi.
10-29-04	3	1425	UDC	1,2	1	UDC1-2	Tracer W
	3	1432	UDC	3,4	1	UDC3-4	Tracer W
	3	1437	UDC	5,6	1	UDC5-6	Tracer W
	3	1442	UDC	7,8	1	UDC7-8	Tracer W
	3	1449	UDC	9,10	1	UDC9-10	Tracer W
	3	1455	UDC	11,12	1	UDC11-12	Tracer W
	0	1502	leak-sim	South Loop R @25'	LS	HSP-SL -25ft	Tracer E
	0	1512	leak-sim	South Loop L @25'	LS	HSP-SL -25ft	Tracer E
10-29-04	0	1530	leak-sim	North Loop R @25'	LS	hSP-NL -25ft	Tracer E (leak sim clock set at 9 hours)
10-29-04	0	1521	leak-sim	North Loop L @25'	LS	hSP-NL -25ft	Tracer E
	3	1540	87TK	Final	FVRS	87FVRS	Tracers A and W
	3	1545	87TK	Final	TS	87TS	Tracers A and W
	3	1549	91TK	Final	FVS	91fvs	Tracers A and W
	3	1553	91TK	Final	TS	91fvs	Tracers A and W
	3	1556	DSLTK	Final	FS	DSLFS	Tracers A and W
	3	1601	DSLTK	Final	TS	DSLTS	Tracers A and W
10-29-04	3	1629	87PL	1	UDC	87TS-UDC1-2	Tracer W (series blown from turbine sump)
10-29-04	3	1632	87PL	1	UDC	87TS-Disp 3,4	Tracer W
	3	1636	87 PL	1	UDC	87TS-Disp 5,6	Tracer W
	3	1644	87 PL	1	UDC	87TS-Disp 7,8	Tracer W
	3	1647	87 PL	1	UDC	87TSDisp 9,10	Tracer W
	3	1651	87 PL	1	UDC	87TS-Disp 11,12	Tracer W
10-29-04	3	1659	91 PI	1	UDC	91TS-Disp 1,2	Tracer W (series blown from turbine sump)
10-29-04	3	1702	91 PI	1	UDC	91TS-Disp 3,4	Tracer W
	3	1709	91 PI	1	UDC	91TS-Disp 5,6	Tracer W
	3	1715	91 PI	1	UDC	91TS-Disp 7,8	Tracer W
	3	1718	91 PI	1	UDC	91TS-Disp 9,10	Tracer W
	3	1722	91 PI	1	UDC	91TS-Disp 11,12	Tracer W
	3	1735	DsL PL	1	UDC	DSLFS-Disp 3,4	Tracer W
	3	1738	DsL PL	1	UDC	DSLFS-Disp 9,10	tracer W

Daily Activity Log				Job#	37561NC		
Site:	Chevon	Client:	Shirley	Client Contact	April weems		
Site Address:	8995 Grant Line Road			Elk Grove, California	Contact #	0	
	TEST DATES :	10-29/10-30	# DAYS=	2		Log Completed By: Nick Poynter	
10-29-04	0	1750	Note	Note	Note	Note	Unable to continue testing because of malfunctioning compressor. .
10-29-04	0	1830	Note	Note	Note	Note	Left site.
10-30-04	10-30-04	0730					Arrived on site.
10-30-04	3	0906	VR	1	Final	87FVRS-Disp 1,2	Tracer W (series blown from 87 FVS)
10-30-04	3	0909	VR	1	Final	87FVRS-Disp 3,4	Tracer W
10-30-04	3	0914	VR	1	Final	87FVRS-Disp 5,6	Tracer W
10-30-04	3	0917	VR	1	Final	87FVRS-Disp 7,8	Tracer W
10-30-04	3	0922	VR	1	Final	87FVRS-Disp 9,10	Tracer W
10-30-04	3	0927	VR	1	Final	87FVRS-Disp 11,12	Tracer W
10-30-04	3	0931	VR	1	Final	87FVRS-91 FVS	Tracer W
10-30-04	3	0938	87 Vent	1	Final	87FVRS-87VENT	Tracer W
10-30-04	3	0943	91 Vent	1	Final	81FVRS-91VENT	Tracer W
10-30-04	3	0947	DSL Vent	1	Final	DSL-DSLVENT	Tracer W
10-30-04	3	0950	UDC	1	Final	VENT UDC	Tracer W
10-30-04	3	1005	HSP	87 Tank Loop	Final	4 samples total - 80ft	Tracers A and W - Samples collected 4 @ 5ft intervals
10-30-04	3	1138	HSP	Split Tank Loop	Final	5 samples total - 90ft	Tracers A and W - Samples collected 4 @ 5ft intervals
10-30-04	3	1340	HSP	Tank-Disp 3/4	Final	4- samples - 50ft	Tracers A and W
10-30-04	3	1320	HSP	Disp 3/4-5/6	Final	4 - sample 70ft	Tracers A and W
10-30-04	3	1300	HSP	Disp 5/6-11/12	Final	4 - samples 80ft	Tracers A and W
10-30-04	3	1345	87 Tank	interstitial	Final	87TI	Tracer A
10-30-04	3	1350	91 tank	interstitial	Final	91TI	Tracer A
10-30-04	3	1355	DSL Tank	interstitial	Final	DSLTI	Tracer A
10-30-04	0		Note	Note	Note		Note: Difficulty threading HSP lines caused at least a 2 hour delay during this project.
10-30-04	0	1430	Note	Note	Note	Note	Left site.

LEAK LOG					Job#	37561NC		
Site:		Chevon		Client:		Shirley		Client Contact
Site Address:		8995 Grant Line Road		Elk Grove, California		Contact #		0
Test Dates						Log Completed By:		
DATE	Leak/Pass	Time	ITEM	Test	Tested	Sample ID	Rate: (ug/L - ppm)	Description
7/27/04	0							
7/27/04	0							

Cut and paste leak info from daily logs

No leaks.

Praxair Services, Inc.

Technical Solutions for the Industrial World

UCISCO



Tracer Research Corrocon

CERTIFICATION OF ELDSM TRACER TIGHT® TEST RESULTS

ELD TEST TYPE: Final

Date: 10-31-04

Prepared For:

Shirley

9595 Lucas Ranch Road
Rancho Cucamonga, CA

Job # 37561NC

Site Info:

Chevon

8995 Grant Line Road
Elk Grove, California

Start Date: 10-29-04

End Date: 10-30-04

SYSTEM		TRACER		STATUS
87	Tank / Sumps	A		Pass
87	Primary Pipe	W		Pass
91	Tank / Sumps	A		Pass
91	Primary Pipe	W		Pass
VR / Vent	Primary Pipe	W		Pass
Diesel	Tank / Sumps	A		Pass
Diesel	Primary Pipe	W		Pass
Diesel	Vent Primary	W		Pass
Dispenser Sumps	# 6	W		Pass

Praxair Services Inc. certifies that the tank and product distribution lines listed in the above table have been tested by means of Enhanced Tracer Tight®. According to EPA standard test procedures for evaluating leak detection methods, the Enhanced Tracer Tight® method is capable of detecting leaks of ≥ 0.005 gallons per hour with a Probability of Detection (PD) of 0.95 and Probability of false alarm of < 0.05

Tester: Nick Poynter State Lic. # 04-1686

Signature: <See Original For Signature> Date: 10-30-04

I declare under penalty of perjury that the information contained in this report is true and correct to the best of my knowledge.

The following criteria are used for the classification of leakage based on the presence or absence of tracer.

PASS

Criteria:
No Tracer Detected

FAIL

Criteria:
Tracer Detected

Office use only

Certification Confirmed by: _____ Date: _____

From: Vince Bunac <vbunac@arb.ca.gov>
To: <glew@arb.ca.gov>, Joe Guerrero <jguerrer@arb.ca.gov>, <sahlinm@swrcb.ca.gov>
Date: 8/5/04 2:11PM
Subject: Wilton ELD

George/Joe/Michael,

This morning 8/5/04 I met with Darren (Town & Country Construction) at the Wilton Site home of the new Chevron station to witness the installation of a Phil-Tite Phase I Vapor Recovery System. I observed the torque of the following components on two of the tanks:

- * Phil-Tite M/F4X4 Riser Adaptor to 175 Lbs.
- * Phil-Tite Spill Container to 100 Lbs.
- * Phil-Tite Rotatable Adaptors to 75 Lbs.

Darren indicated that a pre-test would be conducted in the next couple of weeks. He will inform both Mike and myself when this will take place.

Please let me know if you have any questions,
Vince Bunac